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U.S. PATENT AND TRADEMARK OFFICE

03-08-00 A

PATENT APPLICATION TRANSMITTAL LETTER
(Small Entity)Docket No.
27769

TO THE ASSISTANT COMMISSIONER FOR PATENTS

Transmitted herewith for filing under 35 U.S.C. 111 and 37 C.F.R. 1.53 is the patent application of:

DARWIN GARTON

For: SEALING BOOT FOR DOUBLE WALL TANK ASSEMBLY

jc682 U.S. PTO
09/519326
03/06/00

Enclosed are:

Certificate of Mailing with Express Mail Mailing Label No. **EL523792261US**

Three sheets of drawings.

A certified copy of a application.

Declaration Signed. Unsigned.

Power of Attorney

Information Disclosure Statement

Preliminary Amendment

One signed Verified Statement(s) to Establish Small Entity Status Under 37 C.F.R. 1.9 and 1.27.

Other: Assignment (signed)

CLAIMS AS FILED

| For | #Filed | #Allowed | #Extra | Rate | Fee |
|--|--------|----------|--------------------------|-------------------------|----------|
| Total Claims | 28 | - 20 = | 8 | x \$9.00 | \$72.00 |
| Indep. Claims | 3 | - 3 = | 0 | x \$39.00 | \$0.00 |
| Multiple Dependent Claims (check if applicable) | | | <input type="checkbox"/> | | \$0.00 |
| | | | | BASIC FEE | \$345.00 |
| | | | | TOTAL FILING FEE | \$417.00 |

A check in the amount of **\$417.00** to cover the filing fee is enclosed.

The Commissioner is hereby authorized to charge and credit Deposit Account No. **19-0522** as described below. A duplicate copy of this sheet is enclosed.

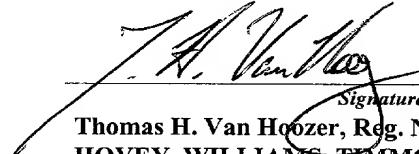
Charge the amount of as filing fee.

Credit any overpayment.

Charge any additional filing fees required under 37 C.F.R. 1.16 and 1.17.

Charge the issue fee set in 37 C.F.R. 1.18 at the mailing of the Notice of Allowance, pursuant to 37 C.F.R. 1.311(b).

Dated: March 6, 2000


Signature
Thomas H. Van Hoozer, Reg. No. 32,761HOVEY, WILLIAMS, TIMMONS & COLLINS
2405 Grand Boulevard, Suite 400
Kansas City, Missouri 64108
(816)474-9050

cc:

CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10)

Applicant(s):

Docket No.
27769

Serial No.

Filing Date

Examiner

Group Art Unit

PC682 U.S. POSTAL SERVICE
03/06/00

Invention: SEALING BOOT FOR DOUBLE WALL TANK ASSEMBLY

I hereby certify that this Express Mail Certification; Patent Transmittal Letter; Application for U.S. Letters Patent including specification, claims and abstract page (11 pgs); 3 sheets of informal drawings; \$417.00 Filing Fee; Combined Declaration and Power of Attorney (signed); Verified Statement Claiming Small Entity Status (signed); Assignment including transmittal sheet (3 pgs) with \$40.00 recordation fee; and return postcard is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 in an envelope addressed to: The Assistant Commissioner for Patents, Washington, D.C. 20231 on March 6, 2000.

Penelope Kress*(Typed or Printed Name of person Mailing Correspondence)**(Signature of Person Mailing Correspondence)*EL523792261US*("Express Mail" Mailing Label Number)*

Applicant or Patentee: GARTON, Darwin

Attorney's Docket No. 27769

Serial or Patent No.:

Filed or Issued:

For: DISCHARGE OUTLET FOR DOUBLE WALL CONTAINMENT TANK ASSEMBLY

**VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY STATUS
(37 CFR 1.9(f) AND 1.27(c)) - SMALL BUSINESS CONCERN**

I hereby declare that I am

the owner of the small business concern identified below:
 an official of the small business concern empowered to act on behalf of the concern identified below:

NAME OF CONCERN Snyder Industries, Inc.

ADDRESS OF CONCERN 4700 Fremont Street, P. O. Box 4583, Lincoln, Nebraska 68504

I hereby declare that the above-identified small business concern qualifies as a small business concern as defined in 13 CFR 121.3-18, and reproduced in 37 CFR 1.9(d), for purposes of paying reduced fees under Section 41(a) and (b) of Title 35, United States Code, in that the number of employees of the concern, including those of its affiliates, does not exceed 500 persons. For purposes of this statement, (1) the number of employees of the business concern is the average over the previous fiscal year of the concern of the persons employed on a full-time, part-time or temporary basis during each of the pay periods of the fiscal year, and (2) concerns are affiliates of each other when either, directly or indirectly, one concern controls or has the power to control the other, or a third party or parties controls or has the power to control both.

I hereby declare that rights under contract or law have been conveyed to and remain with the small business concern identified above with regard to the invention, entitled DISCHARGE OUTLET FOR DOUBLE WALL CONTAINMENT TANK ASSEMBLY by inventor(s) Darwin Garton described in the specification filed herewith

If the rights held by the above-identified small business concern are not exclusive, each individual, concern or organization having rights to the invention is listed below* and no rights to the invention are held by any person, other than the inventor, who could not qualify as a small business concern under 37 CFR 1.9(d) or by any concern which would not qualify as a small business concern under 37 CFR 1.9(d) or a nonprofit organization under 37 CFR 1.9(e).

*NOTE: Separate verified statements are required from each named person, concern or organization having rights to the invention averring to their status as small entities. (37 CFR 1.27)

FULL NAME _____

ADDRESS _____

INDIVIDUAL SMALL BUSINESS CONCERN NONPROFIT ORGANIZATION

FULL NAME _____

ADDRESS _____

INDIVIDUAL SMALL BUSINESS CONCERN NONPROFIT ORGANIZATION

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b)).

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

NAME OF PERSON SIGNING: *Har M. Spurriner*

TITLE OF PERSON OTHER THAN OWNER *President*

ADDRESS OF PERSON SIGNING *3021 Durango Court, Lincoln, NE 68520*

SIGNATURE *Cherry* DATE *3/5/00*

DISCHARGE OUTLET FOR DOUBLE WALL
CONTAINMENT TANK ASSEMBLY

Background of the Invention

5 1. Field of the Invention

This invention concerns a discharge outlet for use with a double wall tank assembly used for storing and dispensing large quantities of liquid. More particularly, it is concerned with a sealing boot for the discharge outlet which enables the liquid to be dispensed through openings in the side walls of the inner tank and outer vessel of the double wall tank assembly.

10 2. Description of the Prior Art

15 Storage of liquid in bulk is well known, and has evolved in importance due to environmental concerns over the escape of chemicals. In the past, it was common to store chemicals underground in large tanks where gravity was used to fill the vessels and the contents were periodically pumped for use. However, the problems associated with leading underground storage tanks has increased the usage of above ground storage tanks. Typically, one or more above-ground vessels have been placed in a "tank farm" where a concrete pad and berm help to contain and capture any problem. Rainwater received in the containment area must be monitored and treated if leakage is detected. This has proven very expensive, as the rainwater represents a large volume of liquid even though the leakage is isolated.

20 25 As a result, storage containers have been developed which include a double walled construction. Examples of containment tanks utilizing such construction are shown in U.S. Patent Nos. 5,287,986 to Frost and 5,333,752 to Harding, Jr. While the double walled construction therein is an improvement over single walled tanks, they require filling and discharge to be accomplished from atop the tanks. This requires extra energy to be expended in pumping the liquid. The need to prevent leakage from a double walled containment tank assembly has thus not heretofore permitted effective discharge openings through the sidewalls of the component inner and outer tanks. Thus, there has developed a need for a containment tank assembly which is capable of use in a variety of environments, minimizes, leakage, and has reduced energy demands.

30 35 Summary of the Invention

These objects have largely been met through the discharge outlet and sealing boot of the present invention. That is to say, the present invention effectively seals openings provided in the sidewalls of a containment tank assembly having an

inner tank and an outer vessel. Moreover, the discharge outlet includes a sealing boot which captures liquid which might leak into the containment area between the inner tank and outer vessel. Advantageously, the sealing boot is flexible and thus accommodates relative movement between the inner tank and outer vessel, such as may be encountered by expansion of the inner tank during filling and external forces applied to the outer vessel.

The discharge outlet of the present invention broadly includes an inner tank flange assembly, an outer vessel flange assembly, and a sealing boot interconnecting the two flange assemblies. piping or conduit is preferably provided which extends from the inner flange assembly exteriorly of the outer vessel for attachment of a valve, piping or the like to effect the transfer of liquid from the tank. The sealing boot is preferably of a flexible material and is provided in the shape of a tire, whereby liquid leaking may be readily visually detected and repair of the inner tank assembly may be effected without deterioration of the containment capabilities of the double wall tank assembly. The piping of the discharge outlet, which is positioned relatively near the bottom of the side of the double wall tank assembly, may be further provided with additional piping interiorly of the inner tank and include a pipe opening near the bottom wall of the inner tank, thereby facilitating removal of most of the liquid within the inner tank when it is desired to be emptied.

These and other advantages of the discharge outlet of the present invention will be readily appreciated by those skilled in the art with reference to the drawings and the following description.

Brief Description of the Drawings

Fig. 1 is a exploded view of a double wall containment tank assembly, showing the opening in the outer vessel for receiving the discharge outlet positioned relatively low on the side thereof;

Fig. 2 is a perspective view of the double wall containment tank assembly shown in Fig. 1 with the inner tank nested in the outer vessel and showing anchor assemblies for holding the double wall containment tank assembly against movement relative to the supporting surface;

Fig.3 is an enlarged, vertical sectional view taken through line 3-3 of Fig. 2 showing the discharge outlet mounted on the double wall containment tank assembly; and

Fig. 4 is an exploded view of the discharge outlet hereof.

Description of the Preferred Embodiment

Referring now to the drawing, a discharge outlet 10 in accordance with the present invention is provided for mounting as part of a double wall containment tank assembly 12 used for bulk storage of liquids. The double wall containment tank assembly 12 includes an inner tank 14, an outer vessel 16, and a plurality of anchor assemblies 18 for securing the tank assembly 12 to a pad or other supporting surface 20. The details of the structure of the tank assembly 12 are further described in my U.S. Patent Application entitled Containment Tank Assembly filed contemporaneously herewith as application serial number _____ filed _____, 2000, and further identified as attorney docket number 27770, the disclosure of which is incorporated herein by reference.

In greater detail, the inner tank 14 includes a lower section 22, an upper section 24 which extends radially outwardly of lower section 22 and is connected thereto by a lip presenting a trough, and a roof 26 which acts as a cover to define a liquid-receiving chamber 28 therewithin. The lip includes a plurality of circumferentially spaced chutes to permit drainage from the trough back into the interior of the lower section 22. A plurality of upstanding lugs 30 project upwardly from the roof 26 for the attachment of cables 32 of anchor assemblies 18 thereto. The anchor assemblies 18 also include anchors 34 which are bolted into the supporting surface 20 (such as a concrete pad) and connected to the cables 32 by eyebolts 36. A manhole cover 38 is interfitted into a manhole in the roof 26 to permit access into the chamber 28. The lugs 30 provide pairs of tie-down flanges 40 and lifting flanges 42, each provided with holes for the passage of cables 32 therethrough. An opening through the side of the upper section 24 permits the attachment of fill pipe 44 thereto. In addition, the roof 26 receives vent 46, filler inlet 48, and level indicator 50 thereon, the latter including a probe for determining the amount of the liquid in the chamber 28. The lower section 22 includes a substantially cylindrical sidewall 52 and a bottom wall 58 which are joined at the lower perimeter 60 of the sidewall 52. A port 54 is provided in the cylindrical sidewall proximate to the lower perimeter 60, with four surrounding circumferentially spaced bolt holes 62 provided through the side wall 52.

The outer vessel 16 includes a multifaceted lower wall portion 64 and a substantially cylindrical upper wall portion 66. The lower wall portion 64 includes a plurality of alternating arcuate sections 68 and chord sections 70. The lower wall portion 64 tapers inwardly in transition area 72 to cylindrical wall portion 66, which lies closely adjacent the cylindrical sidewall 52 when the inner tank 14 is nested in the outer tank 16. The upper wall portion 66 has an upper margin provided with a plurality of

notches 74 for receiving the chutes of the inner tank 14 therein. The arcuate sections 68 are spaced from the cylindrical sidewall 52 of the inner tank 14 to define therebetween a containment area 76. An access opening 78 is provided in one of the arcuate sections 68 for receipt of the discharge outlet 10 therein, with a plurality of surrounding, circumferentially spaced holes 80 for the receipt of the bolts therethrough. A leak detection system 82 may be mounted in the lower wall portion 64 and include a probe extending downwardly into the containment area 76 to detect the presence of liquid therein. The base wall 84 connects to the lower wall portion 64 and receives the bottom wall 58 of the inner tank 14 thereon. Both the inner tank 14 and the outer vessel 16 are rotationally molded of synthetic resin, such as high density linear polyethylene or cross-linked, high density polyethylene.

The discharge outlet 10 includes an inner coupler assembly 86, an coupler flange assembly 88, sealing boot 90, and piping 92. The inner coupler assembly includes interior flange 94 and intermediate flange 96 which each include a ring 98 and a neck 100, each flange 94 and 96 having a central opening 102 to permit the flow of liquid therethrough. Annular gaskets 104 and 106 abut the cylindrical sidewall 52 in sealing relationship thereto. The rings 98 and gaskets 104 and 106 each include apertures 108 aligned in registry with the bolt holes 62 in the cylindrical sidewall 52 for the receipt of bolts 110 therethrough. The bolts 110 are secured by suitable nuts and washers.

The sealing boot 90 is located in the containment area 76 and preferably rotationally molded of synthetic resin such as either high density linear or low density polyethylene for flexibility. The sealing boot 90 is provided in the shape of a tire, including a flat inner wall 112 provided with surrounding, circumferentially spaced apertures 114 for the receipt of bolts 110 therethrough, and a central hole 56 for alignment in registry with the port 54 and the central opening 102 of the neck 100. An circumferentially extending cup-shaped protrusion 116 extends radially outwardly from the flat inner wall 112, with flat outer wall 118 extending radially inwardly therefrom in spaced, opposed relationship to flat inner wall 112. The flat outer wall 118 includes an inner margin 120 having a transverse dimension D which is substantially the same as that of the access opening 78 and smaller than the diameter of the central hole 56 of the flat inner wall 112. The sealing boot 90 thus defines an annular, circumferentially extending channel 122 which permits flexing of the boot 90 and captures liquid leaking past the inner coupler assembly.

The outer coupler assembly 88 has an inner flange provided as semi-annular inner flange plate halves 124 and 126 positioned within the channel 122,

annular gaskets 128 and 130 sandwiching the flat outer wall 118 therebetween, and outer flange plate 132 for engagement against the exterior 134 of the outer vessel. The inner flange plate halves 124 and 126 and the outer flange plate 132 are preferably stainless steel or other corrosion resistant metal. The flat outer wall 118, inner plate halves 124 and 126, gaskets 128 and 130, and outer flange plate include holes which are positioned in registry with the holes 80 in the outer vessel 16 for receipt of bolts 136 therethrough. The bolts 136 are secured in place by suitable nuts and washers as shown in Figs. 3 and 4. The gaskets 104 and 106 and also 128 and 130 are preferably elastomeric, and provided of a chemically resistant natural or synthetic rubber material.

The piping 92 is preferably of a chemical resistant synthetic resin material such as polyvinyl chloride and provides a conduit for the passage of liquid in the chamber 28 out of the containment tank assembly 12. The piping 12 includes a discharge tube 138 having an inner end which is preferably chemically welded to the neck 100 of the intermediate flange 96 and an outer end which receives a connection flange 140 for the attachment of further piping or a discharge valve to control the flow of liquid from the chamber 76. An inner tube 142 extends into the chamber 76 and has one end which is preferably chemically welded to the neck 100 of interior flange 94 and another end which receives thereon elbow 144. The elbow 144 is oriented downwardly and a pickup pipe 146 is connected at one end thereto, the pickup pipe 146 having an open, lower end 148 adjacent the bottom wall for providing an intake into the pipeline 92 for the discharge of liquid therethrough.

In use, the sealing boot 90 and the access opening 78 of the outer vessel are trimmed to fit with the flange plate halves 124, 126 and outer flange plate 132. The flange plate halves 124, 126 are placed in the channel 122 with the gaskets positioned as shown in Fig. 3 and the bolts 136 are inserted and tightened. The inner tank 14 is lowered into the outer vessel 16 in nesting relationship with the chutes received in the inner notches and the port 54 aligned with the access opening 78. The inner tank 14 is then preloaded, and the port 54 is trimmed to receive the inner flange assembly 86. The inner tube 142, elbow 144 and pickup pipe 146 are installed into the inner flange assembly 86 mounted on the cylindrical sidewall 52 to permit liquid to flow through the central opening 102. The discharge tube 138 with connection flange 140 is then chemically welded to the neck 100 of intermediate flange 96, and a control valve such as a ball valve or further piping is attached to the connection flange to permit filling of the chamber 28.

The discharge outlet 10 thus effectively permits the inner tank 14 to be emptied of liquid through gravity rather than pumping, because the integrity of the

containment area 76 is preserved by the sealing boot 90. The boot 90 is sufficiently flexible to permit limited relative movement between the inner tank 14 and the outer vessel 16 due to seismic events, wind forces or thermal expansion. If liquid begins to leak from the inner tank 14 through the inner flange assembly 86, the leakage is nonetheless contained within the channel 122 and can be readily visually observed. Other leaking from the inner tank 14 is confined to the containment area 76 between the inner tank 14 and outer vessel 16, such that even if the leakage rises above the access opening 78 in the side of the outer vessel 16, it does not escape.

Although preferred forms of the invention have been described above, it is to be recognized that such disclosure is by way of illustration only, and should not be utilized in a limiting sense in interpreting the scope of the present invention. Obvious modifications to the exemplary embodiments, as hereinabove set forth, could be readily made by those skilled in the art without departing from the spirit of the present invention.

The inventor hereby states his intent to rely on the Doctrine of Equivalents to determine and assess the reasonably fair scope of his invention as pertains to any apparatus not materially departing from but outside the literal scope of the invention as set out in the following claims.

20

Claims:

1. A discharge outlet for a double walled containment tank having an inner tank having a chamber for receiving liquid therein and a port for the passage of liquid therethrough, and an outer containment vessel having an access opening aligned with the port, the inner tank and the outer containment vessel defining a containment area therebetween, said discharge outlet comprising:

- a conduit fluidically coupled to the inner tank;
- a flexible, annular sealing member positioned between the inner tank and the outer containment vessel in substantial alignment with the port and the access opening in surrounding relationship to said conduit;
- a first coupler for connecting said sealing member to the inner tank around the port; and
- a second coupler for connecting said sealing member to the outer containment vessel around the access opening and thereby fluidically isolating the containment area from the access opening.

2. A discharge outlet as set forth in claim 1, wherein said sealing member includes a circumferentially extending cup-shaped protrusion.

3. A discharge outlet as set forth in claim 2, wherein said sealing member is a flexible synthetic resin material.

4. A discharge outlet as set forth in claim 3, wherein said sealing member includes a substantially flat inner wall extending radially inwardly from said protrusion and having a central hole therein for permitting the passage of liquid therethrough.

5. A discharge outlet as set forth in claim 4, wherein said first coupler includes an inner flange positioned in the chamber and an outer flange positioned in the containment area for receiving a wall of the inner tank therebetween, each of said inner flange and intermediate flange having a central opening for the passage of liquid therethrough.

6. A discharge outlet as set forth in claim 5, wherein said conduit includes a discharge tube fluidically connected to said intermediate flange and having a length sufficient to extend exteriorly of the outer vessel.

5 7. A discharge outlet as set forth in claim 6, wherein said conduit includes an inner tube fluidically connected to said inner flange.

10 8. A discharge outlet as set forth in claim 3, wherein said sealing member includes a substantially flat outer wall extending radially inwardly from said protrusion and having an inner margin.

15 9. A discharge outlet as set forth in claim 8, wherein said inner margin is spaced outwardly from said conduit.

10 10. A discharge outlet as set forth in claim 3, wherein said second coupler includes an inner flange plate positioned in said channel.

20 11. A discharge outlet as set forth in claim 10, wherein said inner flange is provided as two semi-annular flange plate halves.

12. A discharge outlet as set forth in claim 11, wherein said second coupler includes an outer flange plate and positioned relatively exteriorly of said flat outer wall.

25 13. A sealing boot adapted for use with a double-walled containment tank assembly having an inner wall, an outer wall and a containment area therebetween, said sealing boot comprising:

a cup-shaped circumferentially extending protrusion;

30 an inner wall extending radially inward from said protrusion and presenting a central hole; and

an outer wall extending radially inward from said protrusion and presenting an inner margin.

35 14. A sealing boot as set forth in claim 13, wherein said sealing boot is provided of synthetic resin material.

15. A sealing boot as set forth in claim 14, wherein said inner wall is substantially flat and includes a plurality of apertures surrounding said central hole.

5 16. A sealing boot as set forth in claim 13, wherein said central hole has a diameter and the inner margin has a transverse dimension, and wherein the diameter is smaller than the transverse dimension.

10 17. A double walled containment tank assembly comprising:
an inner tank having a chamber for receiving liquid therein and a port for the
passage of liquid therethrough;
an outer containment vessel having an access opening aligned with the port, the
inner tank and the outer containment vessel defining a containment area
therebetween; and
a discharge outlet, said discharge outlet including:
15 a conduit fluidically coupled to said inner tank;
a flexible, annular sealing member positioned between said inner tank
and said outer containment vessel in substantial alignment with
said port and said access opening in surrounding relationship to
said conduit;
20 a first coupler for connecting said sealing member to said inner tank
around said port; and
a second coupler for connecting said sealing member to said outer
containment vessel around said access opening and thereby
fluidically isolating said containment area from said access
opening.
25

18. A containment tank as set forth in claim 17, wherein said sealing member includes a circumferentially extending cup-shaped protrusion.

30 19. A containment tank as set forth in claim 18, wherein said sealing member is a flexible synthetic resin material.

35 20. A containment tank as set forth in claim 19, wherein said sealing member includes a substantially flat inner wall extending radially inwardly from said protrusion and having a central hole therein for permitting the passage of liquid therethrough.

21. A containment tank as set forth in claim 20, wherein said first coupler includes an inner flange positioned in said chamber and an outer flange positioned in the containment area for receiving a wall of said inner tank therebetween, each of said inner flange and intermediate flange having a central opening for the passage of liquid therethrough.

5

22. A containment tank as set forth in claim 21, wherein said conduit includes a discharge tube fluidically connected to said intermediate flange and having a length sufficient to extend exteriorly of said outer vessel.

10

23. A containment tank as set forth in claim 22, wherein said conduit includes an inner tube fluidically connected to said inner flange and extending into said chamber adjacent a bottom wall of said inner tank.

15

24. A containment tank as set forth in claim 19, wherein said sealing member includes a substantially flat outer wall extending radially inwardly from said protrusion and having an inner margin, said outer wall being positioned proximate said outer vessel.

20

25. A containment tank as set forth in claim 24, wherein said inner margin is spaced outwardly from said conduit.

25

26. A containment tank as set forth in claim 19, wherein said second coupler includes an inner flange plate positioned in said channel.

30

27. A containment tank as set forth in claim 26, wherein said inner flange is provided as two semi-annular flange plate halves.

28. A containment tank as set forth in claim 27, wherein said second coupler includes an outer flange plate and positioned relatively exteriorly of said flat outer wall and proximate said outer vessel.

Abstract of the Disclosure

A discharge outlet is provided for attachment to a double wall containment tank assembly having an inner tank and an outer containment vessel. The discharge outlet includes a conduit fluidically connected to the fluid receiving chamber of the inner tank and extending exteriorly of the outer containment vessel, a flexible annular sealing member positioned between the inner tank and the outer containment vessel, and couplers for attaching the sealing member to the inner tank and the outer vessel in surrounding relationship to the conduit. The containment area between the two tanks which is designed for containing spills from the inner tank is thereby fluidically isolated from the access opening through which the conduit passes.

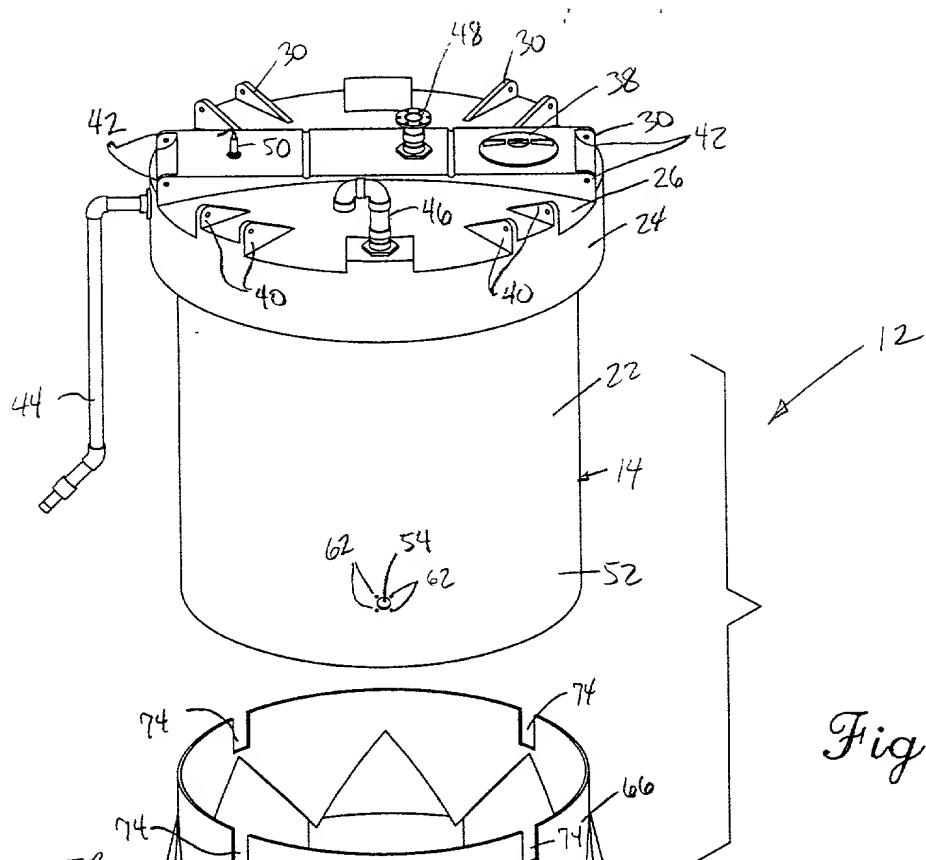


Fig. 1.

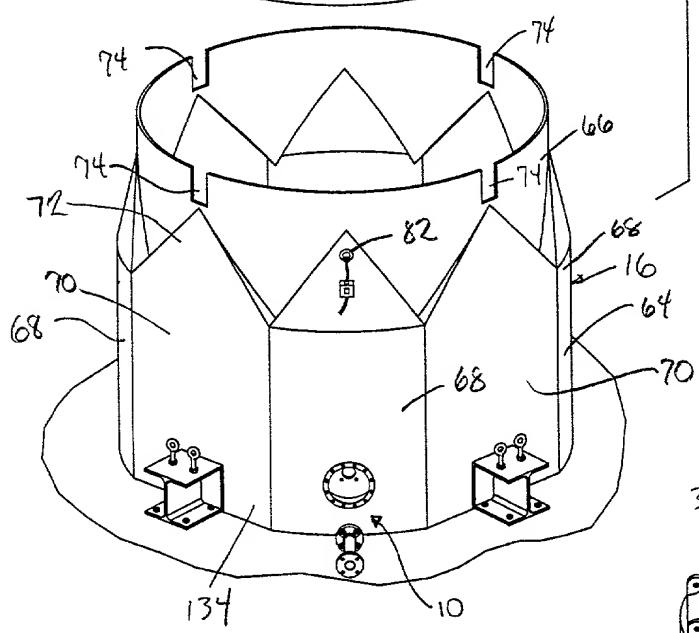
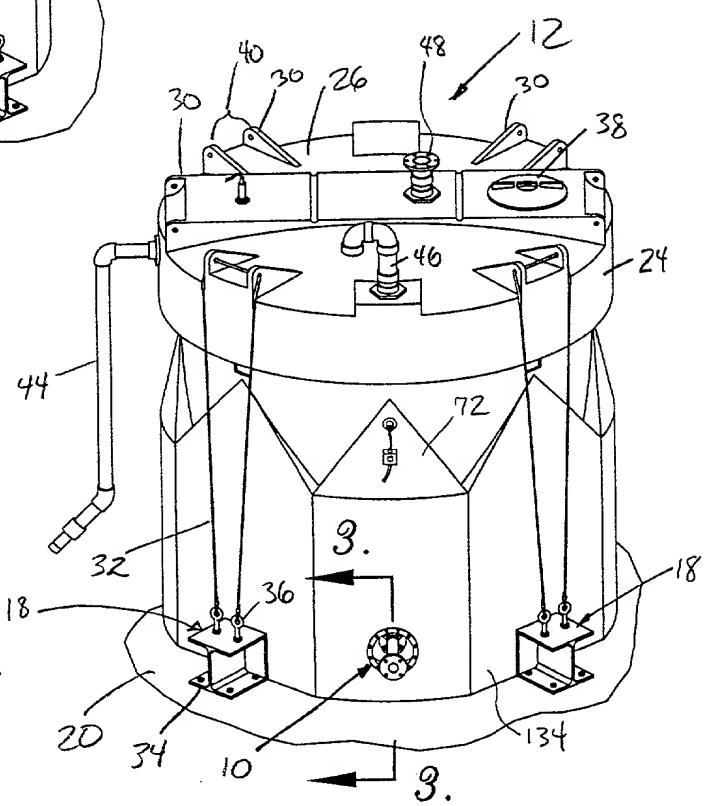


Fig. 2.



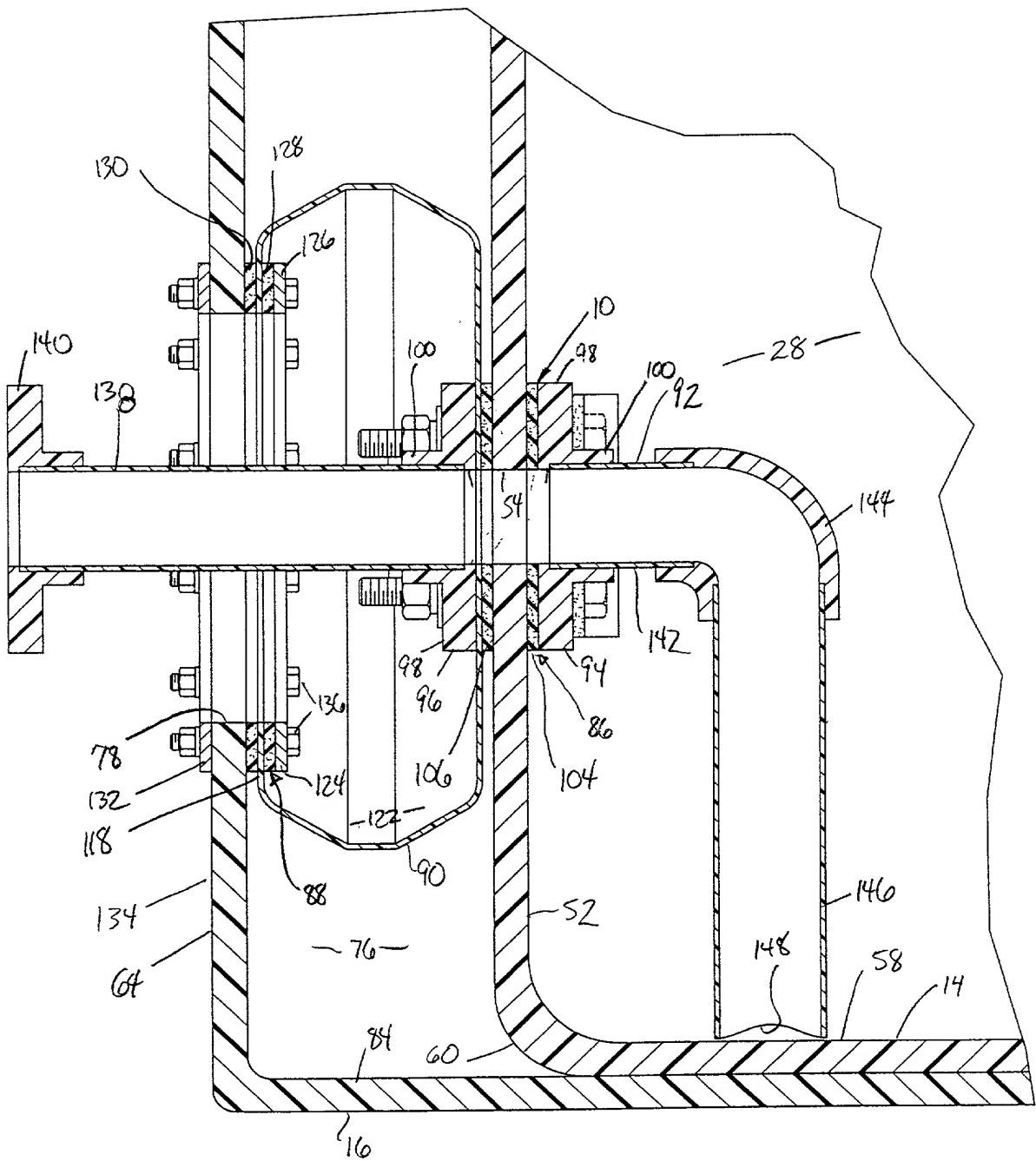


Fig. 3.

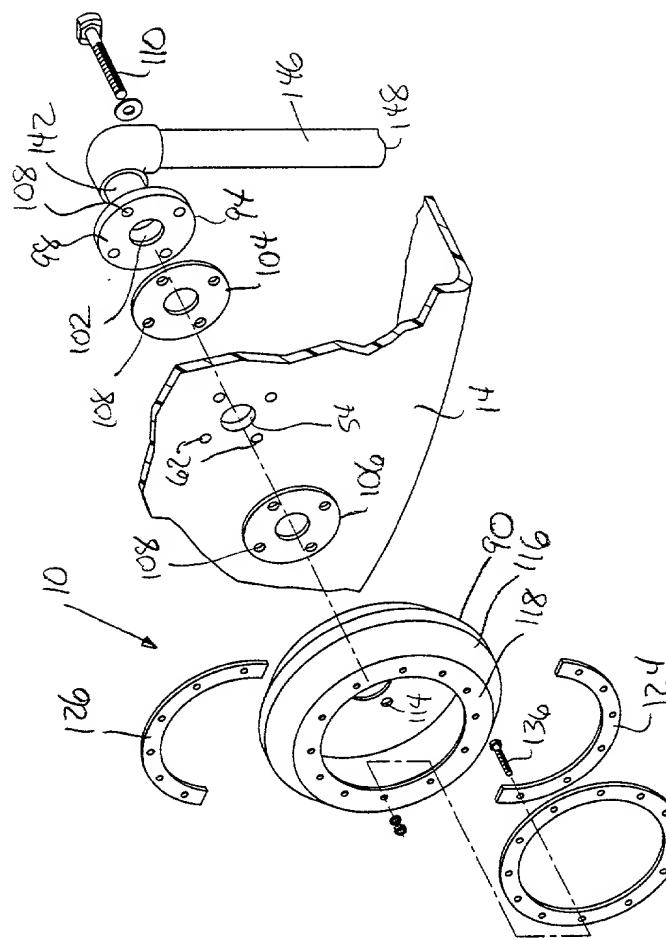
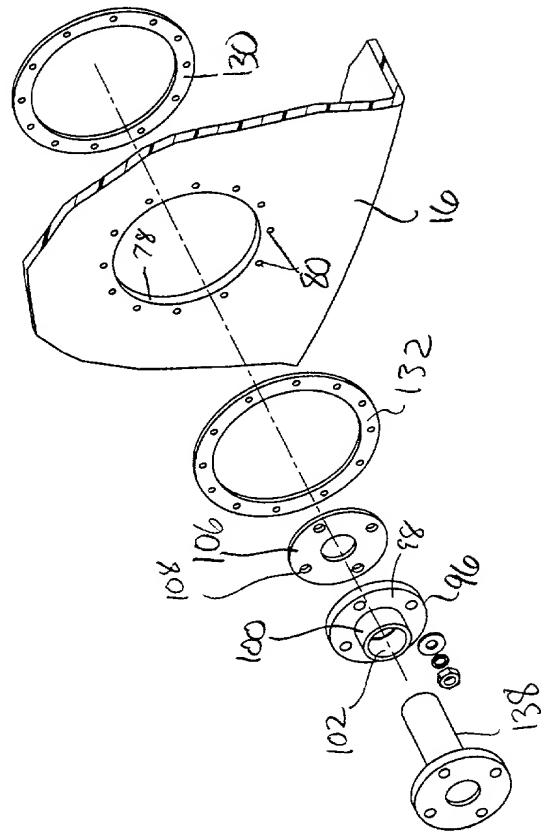


Fig. 4.



COMBINED DECLARATION AND POWER OF ATTORNEY
(Original, Design, National Stage of PCT
or CIP Application)

ATTORNEY'S DOCKET NO.
27769

As a below named inventor I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name, I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

DISCHARGE OUTLET FOR DOUBLE WALL CONTAINMENT TANK ASSEMBLY

the specification of which: (complete (a), (b) or (c) for type of application)

REGULAR OR DESIGN APPLICATION

(a) [x] is attached hereto.
(b) [] was filed on _____ as Application Serial No. _____
and was amended on _____ (if applicable).

PCT FILED APPLICATION ENTERING NATIONAL PHASE

(c) [] was described and claimed in International Application No. _____ filed _____
and as amended on _____ (if any).

ACKNOWLEDGMENT OF REVIEW OF PAPERS AND DUTY OF CANDOR

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose to the Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56(a).

[] In compliance with this duty there is attached an information disclosure statement. 37 CFR 1.97.

PRIORITY CLAIM

I hereby claim foreign priority benefits under Title 35, United States Code, § 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:
(complete (d) or (e))

(d) [x] no such applications have been filed.
(e) [] such applications have been filed as follows

EARLIEST FOREIGN APPLICATION(S), IF ANY FILED WITHIN 12 MONTHS PRIOR TO SAID APPLICATION

| Country | Application No. | Date of Filing | Date of Issue | Priority Claimed |
|---------|-----------------|----------------|---------------|--|
| | | | | <input type="checkbox"/> YES <input type="checkbox"/> NO |
| | | | | <input type="checkbox"/> YES <input type="checkbox"/> NO |
| | | | | <input type="checkbox"/> YES <input type="checkbox"/> NO |

ALL FOREIGN APPLICATION(S), IF ANY FILED MORE THAN 12 MONTHS PRIOR TO SAID APPLICATION

| | | | |
|--|--|--|--|
| | | | |
| | | | |
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PROVISIONAL

I hereby claim the benefit under Title 35, United States Code, § 119(e) of any United States application(s) listed below:

| | | |
|------------------------|-------------|---------------------------------------|
| Application Serial No. | Filing Date | Status (patented, pending, abandoned) |
|------------------------|-------------|---------------------------------------|

CONTINUATION-IN-PART

(Complete This Part Only If This Is A Continuation-In-Part Application)

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose to the Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56(a), which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application:

| | | |
|------------------------|-------------|---------------------------------------|
| Application Serial No. | Filing Date | Status (patented, pending, abandoned) |
|------------------------|-------------|---------------------------------------|

POWER OF ATTORNEY

As a named inventor, I hereby appoint the following attorney(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith:

| | | | |
|----------------------|--------|----------------------|--------|
| Robert D. Hovey | 19,223 | Thomas B. Luebbering | 37,874 |
| Warren N. Williams | 19,156 | Andrew G. Colombo | 40,565 |
| Stephen D. Timmons | 26,513 | Kyle L. Elliott | 39,485 |
| John M. Collins | 26,262 | Tracy Bornman | 42,347 |
| Thomas H. Van Hoozer | 32,761 | Tracey S. Truitt | 43,205 |

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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

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| Full name of sole or first inventor | Darwin Garton <i>Darwin Garton</i> | |
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